

**METHOD AND SYSTEMS FOR IMPROVING TEST OF  
DATA TRANSMISSION IN MULTI-CHANNEL SYSTEMS**

**Abstract**

A method and systems to test a communication system (200) comprising a plurality of emitters (205), receivers (210) and channels (220) are disclosed. According to the method of the invention the data used for the test are preprocessed so as to be analyzed on the fly by the receivers during the test. In a preferred embodiment, a connection identifier value characterizing emitter and receiver addresses as well as data properties, if any, is associated to each data and CRC bits are computed to format frames comprising data, connection identifier value and CRC bits (410). During the test, the communication system transmits frames from emitters to corresponding receivers. Upon frames reception, receivers extract data (455), connection identifier value (460) and CRC bits (465) and compute CRC bits on received data (470). The comparison (475) of transmitted and computed CRC bits in receiver allows determining whether or not frames have been well transmitted.